	ONTRACT/ORDER O COMPLETE BLOCKS		JIAL II LIVIS	1. REQUISIT W68MD9-509	ION NUMBER 96-4493-0001		PA	GE 1 OF 36
2. CONTRACT NO.	3. AWARD/EF	FECTIVE DATE 4. ORD	ER NUMBER			TION NUMBER		LICITATION ISSUE DATE
W912DW-05-P-0196 7. FOR SOLICITATION	28-Apr-20 a. NAME	05				W912DW-05-Q-0067 b. TELEPHONE NUMBER (No Collect Calls)		spr-2005 FER DUE DATE/LOCAL TIME
INFORMATION CALL:	PATRICIA	A ORTIZ			206-764-3			0 AM 21 Apr 2005
9. ISSUED BY USA ENGINEER DISTRI ATTN: CENWS-CT 4735 EAST MARGINAL V	CT, SEATTLE  NAY SOUTH	W912DW	10. THIS ACQU UNRESTR X SET ASIDE	ICTED E: 100	% FOR	11. DELIVERY DESTINATION BLOCK IS MAR SEE SCHE	UNLESS Net	ISCOUNT TERMS 30 Days
SEATTLE WA 98134-232	9		нивис	BUSINESS ONE SMALL	BUSINESS		CONTRACT IS A PAS (15 CFR 700)	RATED ORDER
			□ 8(A)			13b. RATING		
TEL: 206-764-3772 FAX: 206-764-6817			NAICS: 21311 SIZE STANDAI			14. METHOD O	F SOLICITATION IFB	RFP
15. DELIVER TO	CODE		16. ADMINISTE USA ENGINEER D		\TTI E		CODE	W912DW
SEE SO	PATRICIA ORTIZ PH: 206-764-3516 F PATRICIA.A.ORTIZ SEATTLE WA	AX: 206-764-6	817					
17a.CONTRACTOR/OFF	EROR	CODE 07EB9	18a. PAYMENT	WILL BE N	IADE BY		CODE	W66KQZ
GEOTECH ENVIRONMENTAL SERVICES INC RICK UDDIN 5315 BIRCH BARK DR HOFFMAN ESTATES IL 60192-2414			CEFC-AO-P 5722 INTEGR	US ARMY CORPS OF ENGRS FINANCE CENTER CEFC-AO-P 901-874-8556 5722 INTEGRITY DRIVE MILLINGTON TN 38054-5005				
TEL. 847 931-8235		CILITY						
17b. CHECK IF REM	MITTANCE IS DIFFEREN N OFFER	T AND PUT	18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED SEE ADDENDUM					
19. ITEM NO.	20. SCHEDU	ILE OF SUPPLIES/ SI	ERVICES	21	. QUANTITY	/ 22. UNIT	23. UNIT PRICE	24. AMOUNT
		SEE SCHEDULI	≣					
25. ACCOUNTING AND	APPROPRIATION DATA					26. TOTAL	AWARD AMOUN	Γ (For Govt. Use Only)
See Schedule								\$42,228.00
片	INCORPORATES BY REF						DDENDA X ARE	ARE NOT ATTACHED
	JRCHASE ORDER INCOR			1			<u></u> -	ARE NOT ATTACHED
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN C TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SH SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				мѕ	OFFER DATE (BLOCK 5), I	INCLUDING AN'	. YOUR OFFEI	R ON SOLICITATION CHANGES WHICH ARE EMS:
30a. SIGNATURE OF OFFEROR/CONTRACTOR			31a.UNITED	STATES OF	F AMERICA (	SIGNATURE OF CO	ONTRACTING OFFIC	ER) 31c. DATE SIGNED
			à	Eslair	re M Z	Spert		02-May-2005
30b. NAME AND TITLE	OF SIGNER	30c. DATE SIGNE	D 31b. NAME	OF CONTRAC	CTING OFFICE	ER (TYPE (	OR PRINT)	•
(TYPE OR PRINT)			ELAINE M EBERT / CONTRACTING OFFICER					
			TEL: (206)	764-3638		EMAIL: el	aine.m.ebert@us	ace.army.mil

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS (CONTINUED)					PA	AGE 2 OF 36					
19. ITEM NO.		`	20. SCHEDULE OF S	:UPPLIES/ SEF	RVICES	I I	21. QUANTI	TY 22. UNI	T 23. UNIT F	RICE	24. AMOUNT
19. ITEM NO.			<u> </u>		RVICES		21. QUANTI	TY 22. UNI	T 23. UNIT F	PRICE	24. AMOUNT
32a. QUANTITY IN	_		S BEEN 1								
RECEIVED	INSPE	CTED	ACCEPTED, AND CONFO	ORMS TO THE	CONTRAC	CT, EXCEP	Γ AS NOTED:				
32b. SIGNATURE REPRESENT		HORIZED	) GOVERNMENT	32c. DATE			ITED NAME ANI RESENTATIVE	O TITLE OF AU	THORIZED GO\	'ERNME	NT
32e. MAILING ADI	DRESS	OF AUTH	ORIZED GOVERNMENT R	REPRESENTAT	IVE	32f. TELE	PHONE NUMBE	R OF AUTHOR	IZED GOVERNI	MENT RE	EPRESENTATIVE
						32g. E-MA	AIL OF AUTHOR	IZED GOVERN	MENT REPRES	ENTATIV	'E
33. SHIP NUMBER	FINAL	34. VOU	CHER NUMBER	35. AMOUNT V CORRECT		36	. PAYMENT	E PARTIAL	. FINAL	37. CHE	ECK NUMBER
38. S/R ACCOUNT		ER 39. S	S/R VOUCHER NUMBER	40. PAID BY							
			CORRECT AND PROPER		√T42a. RE	CEIVED BY	(Print)				
41b. SIGNATURE	AND TIT	LE OF C	ERTIFYING OFFICER	41c. DATE	461 ==	OED (55.00)	F# # .				
					42b. RE	CEIVED AT	(Location)				
					42c. DA	TE REC'D	(YY/MM/DD)	42d. TOTAL C	ONTAINERS		

#### Section SF 1449 - CONTINUATION SHEET

# **NOTES**

## Web Invoicing System (WInS)

WInS is an optional online invoicing system providing Department of Defense vendors an electronic means of submitting invoices for payment. Vendor registration for WinS is accomplished through the following DFAS website: <a href="https://ecweb.dfas.mil">https://ecweb.dfas.mil</a>. At the website click on NEW Account to register and select "USACE" as the payment system name. The payment office code and location is "TO-UFC Milllington". To establish an account in WInS, vendors must be registered with the Central Contractor Registration (CCR).

Notice to Proceed is hereby issued with signed Purchase Order.

Period of Performance: Work will start on 9 May 2005 and will be completed by 8 June 2005.

Page 4 of 36

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT 0001 1 Lump Sum \$36,340.00 \$36,340.00

DRILLING/TESTING

**FFP** 

PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO INSTALLED WATER SUPPLY WELL IN ACCORDANCE WITH STATEMENT OF WORK, 9 MARCH 2005 AND DRAWING. START OF WORK WILL TO START ON 9 9 MAY 2005 AND WILL BE COMPLETED BY 8 JUNE 2005. WAGE DETERMINATION NO.: 1994-2567, REVISION 27, DATED 09/20/2004 IS HEREBY INCORPORATED.

0001AA MOBILIZATION AND DEMOBILIZATION 1 LUMP SUM \$8,200.00

0001AB DRILL WELL 250 L.F. 250 L.F. UNIT PRICE \$54.00

0001AC FURNISH/INSTALL 8-INCH WELL CASING 200 L.F. UNIT PRICE \$23.00

0001AD FURNISH/INSTALL 8-INCH WELL SCREEN 50 L.F. UNIT PRICE \$95.00

0001AE FURNISH/INSTALL SURFACE SEAL 18 L.F. UNIT PRICE \$35.00

0001AF DEVELOPING WELL 8 EACH UNIT PRICE \$150.00

0001AG INSTALL/REMOVE TEST PUMP 1 Lump Sum \$1,200.00

0001AH PUMPING TEST 10 HRS UNIT PRICE \$150.00

0001AI STANDBY TIME 8 HRS UNIT PRICE \$95.00

PURCHASE REQUEST NUMBER: W68MD9-5096-4493-0001

NET AMT \$36,340.00

ACRN AB Funded Amount \$36,340.00

FOB: Destination

Page 5 of 36

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMOUNT 0002 1 Lump Sum \$5,888.00 \$5,888.00

WELL CASTING

FFP

PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO DRILL WELL ADDITIONAL 50 L.F. IN ACCORDANCE WITH STATEMENT OF WORK, 9 MARCH 2005 AND DRAWING. WAGE DETERMINATION NO.: 1994-2567, REVISION 27, DATED 09/20/2004 IS HEREBY INCORPORATED.

0002AA DRILL WELL ADDITIONAL 50 L.F. 50 L.F. UNIT PRICE \$30.00

0002AB DRIVE SAMPLING 2 EACH UNIT PRICE \$299.00

0002AC FURNISH INSTALL 8-INCH WELL CASTING 50 L.F. UNIT PRICE \$15.00

0002AD DEVELOP WELL OVER 8 HOURS 32 HRS UNIT PRICE \$95.00

PURCHASE REQUEST NUMBER: W68MD9-5096-4493-0001

NET AMT \$5,888.00

ACRN AB Funded Amount \$5,888.00

FOB: Destination

#### ACCOUNTING AND APPROPRIATION DATA

AB: 21520500000 088082 251683KF6132001000000 E314 35026

COST 000000000000

CODE:

AMOUNT: \$42,228.00

#### CLAUSES INCORPORATED BY REFERENCE

52.212-4 Contract Terms and Conditions--Commercial Items OCT 2003 52.236-13 Accident Prevention NOV 1991

#### CLAUSES INCORPORATED BY FULL TEXT

Successor Contracting Officers (52.201-4001)

The Contracting Officer who signed this contract is the primary Contracting Officer for the contract. Neverthless, any Contracting Officer assigned to the Seattle District and acting within his/her authority may take formal action on this contract when a contract action needs to be taken and the primary Contracting Officer is unavailable.

# 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (JAN 2005)

- (a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:
- (1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).
- (2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).
- (b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (JUL 1995), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).
(2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999) (U.S.C. 657a).
(3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jan 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer) (U.S.C. 657a).
(4) (i) 52.219-5, Very Small Business Set-Aside (JUNE 2003) (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).
(ii) Alternate I (MAR 1999) to 52.219-5.
(iii) Alternate II to (JUNE 2003) 52.219-5.
(5)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).
(ii) Alternate I (OCT 1995) of 52.219-6.
(iii) Alternate II (MAR 2004) of 52.219-6.

\_\_\_\_(6)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

\_\_\_ (ii) Alternate I (OCT 1995) of 52.219-7.

(iii) Alternate II (MAR 2004) of 52.219-7.
(7) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637 (d)(2) and (3)).
(8)(i) 52.219-9, Small Business Subcontracting Plan (JAN 2002) (15 U.S.C. 637(d)(4)).
(ii) Alternate I (OCT 2001) of 52.219-9
(iii) Alternate II (OCT 2001) of 52.219-9.
(9) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).
(10)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (JUNE 2003) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
(ii) Alternate I (JUNE 2003) of 52.219-23.
XX (11) 52.219-25, Small Disadvantaged Business Participation ProgramDisadvantaged Status and Reporting (OCT 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
XX (12) 52.219-26, Small Disadvantaged Business Participation ProgramIncentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
XX (13) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004).
XX (14) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).
XX (15) 52.222-19, Child LaborCooperation with Authorities and Remedies (Jun 2004) (E.O. 13126).
(16) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
(17) 52.222-26, Equal Opportunity (APR 2002) (E.O. 11246).
(18) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).
(19) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).
(20) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212).
(21) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).
(22)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (AUG 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).
(ii) Alternate I (AUG 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
(23) 52.225-1, Buy American ActSupplies (JUNE 2003) (41 U.S.C. 10a-10d).

(24)(i) 52.225-3, Buy American ActFree Trade AgreementsIsraeli Trade Act (Jan 2005) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78, 108-286).
(ii) Alternate I (JAN 2004) of 52.225-3.
(iii) Alternate II (JAN 2004) of 52.225-3.
(25) 52.225-5, Trade Agreements (Jan 2005) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).
(26) 52.225-13, Restrictions on Certain Foreign Purchases (OCT 2003) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of Treasury).
(27) 52.225-15, Sanctioned European Union Country End Products (FEB 2000) (E.O. 12849).
(28) 52.225-16, Sanctioned European Union Country Services (FEB 2000) (E.O. 12849).
(29) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
(30) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
(31) 52.232-33, Payment by Electronic Funds TransferCentral Contractor Registration (OCT 2003) (31 U.S.C. 3332).
(32) 52.232-34, Payment by Electronic Funds TransferOther than Central Contractor Registration (MAY 1999 (31 U.S.C. 3332).
(33) 52.232-36, Payment by Third Party (MAY 1999) (31 U.S.C. 3332).
(34) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).
(35)(i) 52.247-64, Preference for Privately Owned U.SFlag Commercial Vessels (APR 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631).
(ii) Alternate I (APR 2003) of 52.247-64.
(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: [Contracting Officer check as appropriate.]
XX (1) 52.222-41, Service Contract Act of 1965, as Amended (MAY 1989) (41 U.S.C. 351, et seq.).
XX (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
(3) 52.222-43, Fair Labor Standards Act and Service Contract ActPrice Adjustment (Multiple Year and Optio Contracts) (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
(4) 52.222-44, Fair Labor Standards Act and Service Contract ActPrice Adjustment (February 2002) (29 U.S.C 206 and 41 U.S.C. 351, et seq.).
(5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreements (CBA) (May 1989) (41 U.S.C. 351, et seq.).

- (d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.
- (1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.
- (2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
- (3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vi) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--
- (i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.
- (ii) 52.222-26, Equal Opportunity (April 2002) (E.O. 11246).
- (iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (December 2001) (38 U.S.C. 4212).
- (iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).
- (v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).
- (vi) 52.222-41, Service Contract Act of 1965, as Amended (May 1989), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).
- (vii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (April 2003) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.
- (2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

# 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://www.acq.osd.mil/dp/dp/dars/dfars.html (End of clause)

# SCOPE OF WORK DRILL TEST WELL AT CHAPEL COMPLEX FORT LEWIS

#### 09 March 2005

# **GENERAL**

# **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

American National Standards Institute (ANSI)

Z 535.1-02 Safety Color Code

American Society for Testing and Materials (ASTM).

A 53/A53M-02	Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless
A 312/A312M REV A-04	Seamless and Welded Austenitic Stainless Steel Pipes
C70-94	Surface Moisture in Fine Aggregate
C91 REV A-03	Masonry Cement
C 117-03	Test Method for Materials Finer than 75- Micrometer (No. 200) Sieve in Mineral Aggregates by Washing
C 136-01	Sieve Analysis of Fine and Coarse Aggregates
C 150-04	Portland Cement
C 387-00 E-01	Packaged, Dry, Combined Materials for Mortar and Concrete
D 1889-00	Turbidity of Water
D 2216-98	Laboratory Determination of Water (Moisture) Content of Soil and Rock

U.S. Army Corps of Engineers (USACE).

EM 385-1-1 (2003) Safety and Health Requirements

EM 1110-2-1907 Soil Sampling

American Petroleum Institute (API).

Line Pipe 5L-04

American Water Works Association, Inc. (AWWA)

A100-97 Water Wells

B300-99 Hypochlorites

B301-98 Liquid Chlorine

B303-96 Sodium Chlorite

C200-91 Steel Water Pipe 6-inches and larger

C206-91 Field Welding of Steel Water Pipe

American Welding Society. (AWS)

D1.1-04 Structural Welding Code - Steel

Washington Administrative Code (WAC)

State of Washington, Department of Ecology, WAC 173-160

Minimum Standards for Construction and

Maintenance of Wells

WAC 173-162 Regulation and Licensing of Well Contractors and

Operators

WAC 246-290 **Public Water Supplies** 

# 1.2 ORDERING PUBLICATIONS.

To order publications, contact the following sources:

(a) American National Standards Institute (ANSI) 11 West 42<sup>nd</sup> St.

New York, NY 10036 Ph (212) 642-4900

Internet: <a href="http://www.ansi.org/">http://www.ansi.org/</a>

(b) American Society for Testing and Materials (ASTM)100 Barr Harbor DriveWest Conshohocken, PA 19428-2959Ph (610) 832-9500

E-mail: mailto:cservice@astm.org

(c) USACE Publications Depot ATTN CEIM-SP-D 2803 52nd Avenue Hyattsville, MD 20781-1102 Phone (301) 394-0081

Internet: <a href="http://www.usace.army.mil/publications/">http://www.usace.army.mil/publications/</a>

(d) American Petroleum Institute (API) 1220 L Street, NW Washington, DC 20005 Ph (202) 682-8375

Internet: <a href="http://www.api.org/">http://www.api.org/</a>

(e) American Water Works Association, Inc. (AWWA) 6666 W. Quincy Ave. Denver, CO 80235 Ph (303) 794-7711

Internet: http://www.awwa.org

(f) American Welding Society, Inc. (AWS) 550 N.W. LeJeune Road Miami, FL 33126 Ph (800) 443-9353

Internet: http://www.aws.org/

(g) Washington Department of Ecology Water Resources Department Post Office Box 47600 Olympia, WA 98504-7600 Ph (360) 407-6000

Internet: <a href="http://www.wa.gov/ecology/leg/ecywac.html">http://www.wa.gov/ecology/leg/ecywac.html</a> - well

(h) Government Printing Office (for CFR) Washington, DC 20402 Ph (202) 512-1800

(i) NSF International (NSF) P.O. Box 130140 Ann Arbor, MI 48113-0140 Internet: <a href="http://www.nsf.org">http://www.nsf.org</a>

The applicable version of each publication shall be the one in effect at the time of Contract award.

#### 1.3 MEASUREMENT AND PAYMENT

- 1.3.1 General. The contract price for each item shall constitute full compensation for furnishing all plant, labor, materials, and incidentals, and performing all operations necessary to construct and complete the items in accordance with the specifications. Payment for each item shall not be considered as full compensation, notwithstanding that minor features may not be specifically mentioned herein. Materials and work paid for under one item will not be paid for under any other item. The Contractor shall not be compensated for loss of time or equipment due to breakdown of equipment, lack of proper equipment as determined by the Contracting Officer, labor shortages or disputes, delay in obtaining materials, or for any other reason not directly the fault of the Government. Items for which no separate payment is provided shall be considered as incidental to the performance of the work which it is mentioned.
- 1.3.2 Measurement. Measurement of the units of work shall be made as hereinafter specified.
- 1.3.2.1 Items Measured by Lineal Measurement: Measurement of well and casing shall be vertical measurement from original ground surface. The 8-inch nominal I.D. casing will be measured for payment as the number of lineal feet of casing left in place in an accepted, completed well.
- 1.3.2.2 Items Measured by Hours: Measurement of developing, pumping, and standby time shall be to the nearest 1/2 hour.
  - 1.3.3 Payment.
- 1.3.3.1 Mobilization and Demobilization. Payment will be made at contract lump sum price for Item 0001AA, Mobilization and Demobilization, payment of which shall constitute full compensation for transportation of all plant, material, equipment, and supplies to and from the well site. Sixty percent of Item 0001AA will be paid following completion of mobilization to the work area, including furnishing complete assembly in working order of all equipment necessary to perform the required drilling and sampling. Obtaining the necessary state well drilling permit shall be incidental to the work. The remaining 40 percent of Item 0001AA will be paid when all equipment has been removed from the area, cleanup accomplished to the satisfaction of the Contracting Officer, and demobilization is complete.
- 1.3.3.2 Drilling. Payment will be made at the applicable contract unit price for Item 0001AB and Optional Item 0002AA, Drill Well, payment of which shall constitute full compensation for drilling, taking cutting samples, furnishing sample containers, bailing or blowout tests, and disposal of waste material. Furnishing of temporary casing and, if necessary, a downhole casing cutter to cut off and leave a casing shoe in the hole shall be incidental to the work No payment will be made for drilling that does not meet the requirements for alignment specified in Section: EXECUTION, paragraph Alignment, nor will payment be made if records are not kept in accordance with paragraph RECORDS.
- 1.3.3.3 Drive Sampling: Payment will be made at the contract unit price for Optional Item 0002AB, Drive Sampling, payment of which shall constitute full compensation for drive sampling as specified. One sample shall be defined as tool changing times, placing sampler in boring,

driving sampler, removing sampler and sampling tools from boring, extracting sample, and placing it in Contractor-furnished container.

- 1.3.3.4 Furnish/Install 8-inch Well Casing: Payment will be made at the applicable contract unit price for Item 0001AC and Optional Item 0002AC, Furnish/Install Well Casing, payment of which shall constitute full compensation for furnishing, installing, and, if necessary, grouting the permanent well casing
- 1.3.3.5 Furnish/Install Well Screen in 10-foot Sections. Payment will be made at the contract unit price for Item 0001AE, Furnish/Install Well Screen in 10-foot Sections, payment of which shall constitute full compensation for welding and installing the sections of well screens including: (1) gradation testing of aquifer samples, (2) furnishing and installing riser pipe with neoprene or equivalent packer, tail pipe with bail hook, and pulling of the casing back to the top of the screen, and (3) all other incidentals for a complete installation (see Section: EXECUTION, paragraph INSTALLATION OF WELL SCREEN).
- 1.3.3.6 Furnish/Install Surface Seal. Payment will be made at the applicable contract unit price for Item 0001AE, Furnish/Install Surface Seal, payment of which shall constitute full compensation for drilling, sealing, and furnishing any temporary or permanent surface casing. Furnishing of necessary sealing materials is incidental to the work.
- 1.3.3.7 Developing Well. Payment will be made at the applicable contract unit price for Item 0001AF and Optional Item 0002AD, Developing Well, payment of which shall constitute full compensation for developing the well. Payment will be made only for the actual number of hours spent in developing the well.
- 1.3.3.8 Installing Test Pump. Payment will be made at the contract lump sum price for Item 0001AG, Install/Remove Test Pump, payment of which shall constitute full compensation for installing and removal of test pump and all other equipment required for test pumping and monitoring of test. The cost of furnishing and transporting of such equipment shall be paid for under Item 0001AA, Mobilization and Demobilization.
- 1.3.3.9 Pumping Test. Payment will be made at the applicable contract unit price for Item 0001AH, Pumping Test, payment of which shall constitute full compensation for performing all pumping after the well has been developed, including the keeping of records of drawdown and stabilization, as specified. The number of hours to be paid for will be the number of hours the pump is actually operating as specified herein or as directed by the Contracting Officer.
- 1.3.3.10 Standby Time. Payment will be made at the applicable contract unit price for Item 0001AI, Standby Time, payment of which shall constitute full compensation for the standing by of equipment when taking well recovery readings or when directed by the COR for any reason other than the violation of the Contractor of any provision of this contract.

# SUPPLEMENTARY REQUIREMENTS.

SANITARY PROVISIONS. Contractor shall provide such accommodations for use of his employees as may be necessary and shall maintain same in a neat and sanitary condition. Such accommodations shall comply with requirements and regulations of state health department, local ordinances, and other authorities having jurisdiction.

# CONTRACTOR'S WATER AND ELECTRICITY.

Water. Potable water for drilling and grouting will be available to the Contractor from a nearby hydrant that will be designated by the COR. Contractor shall provide a Government approved backflow prevention device in the supply line between the hydrant and Contractor's equipment/tanks. In lieu of a backflow prevention device Contractor shall maintain a 6-inch air gap between the supply hose and the Contractor's reservoir tank. Intent is to prevent contamination by siphoning of water from Contractor's tank.

Electricity. All electric current required by the Contractor shall be furnished by the Contractor.

# UNIT PRICE SCHEDULE

Furnish all labor, materials and equipment to provide for installation of a water supply well in accordance with the specifications and drawings incorporated herein.

#### 1.4 GENERAL REQUIREMENTS

- 1.4.1 General. A test well shall be drilled at the North Fort Lewis Chapel Complex site to determine if an adequate supply of water is available in the Salmon Springs confined aquifer for construction of a water supply well. The well will be drilled in the SW1/4 of the NE1/4 of Section 19, T19N, R2E (W.M.) in Pierce County WA. The intent and purpose of this work is to drill a test well having a minimum capacity of 175 gallons per minute (gpm) with an anticipated depth of 250 feet and a bottom diameter of 8 inches. Wells may be shortened or extended at the direction of the Contracting Officer without any adjustment in any unit prices. Contractor has sole responsibility for having equipment and supplies on hand to enable completion of the well to a maximum depth of 300 feet. Work includes:
  - (a) Drill the well in such a manner that casing is concurrent with the drilling operation.
  - (b) Install a screen assembly in the well.
  - (c) Perform a pumping test.
  - (d) Provide, implement and ensure methods to comply with State of Washington WAC 173-160 and U.S. Army Corps of Engineers Safety and Health Manual EM 385-1-1.

The test well shall be cased to the estimated depth of pump installation. A well screen will be required. The work consists of furnishing all plant, labor, materials, transportation, supplies and accessories to accomplish the work as specified. Contractor shall furnish sanitary provisions. All work shall be completed within 30 days after Notice to Proceed.

- 1.4.2 Site Conditions. The drilling site is generally level and easily accessed from paved and unpaved roads. The anticipated subsurface materials are clay, silt, sand, gravel, cobbles and boulders deposited as recessional and advance glacial drift and interglacial sediments. The test wells will probably be screened in the Salmon Springs aquifer, which is confined below the Kitsap Formation (aquitard).
- 1.4.3 Access onto Fort Lewis. The specified work is to be performed at an operating Military Installation with consequent restrictions on entry and movement of nonmilitary personnel and equipment. All contractor-owned and privately-owned vehicles will be required to obtain an access pass/vehicle decal. The contractor shall provide names and social security numbers of all personnel to the USACE Project Manager (Tammy Detrixhe, 206-764-3468) for access to the site a minimum of 72 hours prior to the need for site access. Temporary vehicle passes shall be obtained at the main Fort Lewis entrance (I-5 exit 120).
- 1.4.4 Coordination and Permits. The Contracting Officer's Representative (COR) will be responsible for locating the well, acquiring underground utility digging permits, and coordinating all field activities with Department of Public Works. Contractor shall be responsible for paying all required fees and filing all required start cards for drilling the well.

#### 1.5 SUBMITTALS

Government approval is required for submittals with (**GA)** designation; submittals having an (**FIO**) designation are for information only.

- 1.5.1 Accident Prevention Plan (**GA**). Prior to initiation of the work the Contractor shall develop an Accident Prevention Plan (APP) and Activity Hazard Analysis (AHA) meeting the requirements of the Corps of Engineers Safety Manual EM 385-1-1. The APP shall be written for the specific work and hazards of the contract and shall address measures to be taken by the Contractor to control hazards associated with materials, services, or equipment provided by suppliers. The AHA shall define the activities to be performed and identify the sequences of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. The Contracting Officer's Authorized Representative shall approve the submitted Accident Prevention Plan prior to beginning fieldwork. The required Accident Prevention Plan is incidental to the work performed under this contract and, therefore no separate payment will be made for its preparation. Appendix A of EM 385-1-1 provides the minimum basic outline for the accident prevention plan.
- 1.5.2 Work Plan (**GA**). Submit proposed plan for drilling and constructing the well, before beginning work. The plan shall include, but not be limited to, the proposed method of drilling and equipment to be used, details on proposed casing, well screen, grouting materials, and methods and equipment proposed for developing the well and for performing pump tests. No work shall be performed until the drilling plan has been approved. Details of specific methods to be employed to control potential contamination or pollution arising from well installation activities, shall also be included.
- 1.5.3 Permits (**GA**). The Contractor shall be responsible for obtaining permits, licenses, and other requirements necessary for prosecution of the work. The Contracting Officer's Authorized Representative will be responsible for acquiring the digging permit for the boring staked by the Government. For welding work the, Contractor may be required to obtain a Hot Work Permit from the installation fire department. Copies of such documents shall be submitted to the Contracting Officer's Authorized Representative prior to commencing the fieldwork.
- 1.5.4 Driller's License (**F10**). Submit a copy of the Contractor's and well driller's State of Washington Drillers license.
- 1.5.5 State of Washington Water Well Report (**F10**). State Of Washington Form ECY 050-1-20, shall be completed by the Contractor and a copy of the report shall be furnished to the Contracting Officer upon completion of the well.
- 1.5.6 Well Screen Slot Size (**GA**). Sieve analysis of aquifer material and recommended screen slot size shall be submitted for COR approval prior to ordering the well screen from the screen manufacturer.

#### 1.6 ENVIRONMENTAL PROTECTION.

The Contractor shall take all precautions as may be required to prevent contaminated water or water having undesirable physical or chemical characteristics from entering the water supply stratum through the well bore or by seepage from the ground surface. In the event that the well becomes contaminated or that the water having undesirable physical or chemical characteristics does enter the well due to the neglect of the

Contractor, he shall, at his own expense, perform such work and supply such materials as casings, seals, sterilizing agents, and other corrective action as directed, to eliminate the contamination or shut off the undesirable water. The Contractor shall cap the well as directed by the COR to prevent contamination of the well. The Contractor also shall take all precautions necessary to prevent contamination of the ground surface or of surface waters resulting from drilling of the well

#### 1.7 ABANDONMENT OF WELL.

A Well abandoned by the Contractor or rejected by the Contracting Officer for any reason, not the fault of the Government (i.e. misalignment, mechanical failure of the drilling equipment, Contractor negligence, unauthorized use of explosives, blockage of well by tools or drilling equipment, etc.) will not be accepted and shall be permanently sealed by methods complying with Federal and State regulations and as approved. A replacement well drilled, constructed, developed, and completed in accordance with these specifications shall be provided within a radius of 20 feet from the abandoned well. The exact location shall be determined by the COR. No payment will be made for wells abandoned by the Contractor or rejected by the Contractor Officer. The Contractor will be permitted to remove and salvage the casing from the rejected well.

#### 1.8 COOPERATION WITH OTHER CONTRACTORS.

The Contracting Officer may have other contractors in the same area in which this work is being performed. The Contractor, in the best interest of the Government, shall provide all necessary cooperation so that the concurrent work of other contractors is not unduly disrupted by the drilling work of this contract. The Contracting Officer shall be the sole judge concerning satisfactory cooperation among contractors, and as such the decision of the Contracting Officer shall prevail.

#### 1.9 PERSONNEL REQUIREMENTS.

The drill shall be manned with an experienced and qualified crew to ensure efficient and timely execution of the work. The minimum acceptable crew for the drill shall be a qualified drill operator with a minimum of three years experience in the installation of water wells and a qualified helper. Qualified drill operator shall possess all licenses required to drill subsurface borings and wells in the state of Washington, and have a copy of the basic contract technical specifications at the job site. The Contractor shall submit a statement to the Contracting Officer's Authorized Representative describing prior experience of the person or persons designated to perform the work.

#### 1.10 RECORDS.

1.10.1 Daily Logs (**GA**). The Contractor's drill operator shall maintain an accurate and precise chronological daily driller's log of events which shall be submitted to the Contracting Officer's Authorized Representative at the conclusion of the boring or as otherwise directed. The log shall be periodically maintained during the workday. The following items shall be included in this daily log:

- (a) Beginning of work shift (time, date, and location)
- (b) Measure static water level at beginning of each shift
- (c) Delays in work (times and circumstances)
- (d) Any significant occurrence in performing work

- (e) Start and stop time of hourly payment items
- (f) Quantities of non-hourly pay items
- (g) Equipment failures
- (h) End of shift casing depth and height left above ground surface
- (i) End of work shift (time and date)
- (j) Movements to new boring locations
- (k) Description of materials encountered and depth, when the Contractor does not furnish a geologist, and
- (I) Any pertinent comments concerning the daily performance.

The Contractor shall furnish any drillers logs required by state regulations to the pertinent state agency.

- 1.10.2 Plugging Records (**GA**). The Contractor shall submit plugging records to the Contracting Officer's Authorized Representative and to the State in accordance with Washington State law. The Contractor shall include the following information regarding the plugging of a boring or decommissioning of a well on his daily logs:
  - (a) Plugging method utilized (ie casing perforated and pressure grouted)
  - (b) Perforation and/or casing extraction
  - (c) Unusual conditions encountered during plugging
  - (d) Quantities of bentonite, grout, or other material utilized in plugging
  - (e) Length and size of casing extracted

#### 2 PRODUCTS

#### 2.1 WELL CASING.

The casing at the bottom of the water supply well shall have a minimum nominal I.D. of 8 inches, a minimum wall thickness of 0.250-inch, and shall meet the requirements of ASTM A 53. Casings shall be provided with drive shoes. The Contractor shall construct each water supply well from new steel pipe having lathe-turned beveled ends. The beveled ends shall have protective coverings to prevent damage to the ends during transit. Well casing shall be installed concurrent with the drilling as necessary to prevent caving. Only casing of standard manufacture will be accepted for use in the well and brand name shall be plainly marked on each length by the manufacturer. Welding shall be in accordance with the applicable provisions of AWS D1.1. Welding rods shall meet the requirements of the American Welding Society for welding metal of the same composition as the well casing. Alignment clamps for welding casing shall be used.

#### 2.2 WELL SCREEN ASSEMBLY:

The well screen assembly shall be well screen manufactured of type 304 stainless steel. Well screen shall be of an approved "V"-wire-wound type. Both wire and supporting bars shall be stainless steel. A wire-wound screen manufactured with supported bars of material different from the wire will not be acceptable. The interval to be screened shall be determined by the COR. The screen slot size shall be determined by the screen manufacturer based on the gradation test results from the Contractor and shall be subject to approval/revision by the COR. At a minimum, the well screen assembly shall consist of the designated

length of 8-inch nominal I.D. telescoping well screen welded to a 5-foot length of 8-inch nominal I.D. riser pipe equivalent to zero slot well screen, with a self-sealing neoprene or equivalent packer factory welded to the top of the riser pipe. The bottom of the well screen shall be welded to a 2-foot length of 8-inch nominal I.D. tail pipe equivalent to zero slot well screen. The tail pipe shall have a closed bottom with bail. The riser and tail pipes shall be constructed of material similar to that used in the well screen. If the Contractor does not select a telescoping screen installation, 8-inch pipe size screen may be used instead. All sections of stainless steel screen and stainless steel pipe shall be joined by welding joints made by a certified welder following standardized procedures of the American Welding Society. The joints shall be welded with welding rod suitable for joining the material without loss of corrosion resistance.

#### 2.3 CEMENT GROUT.

Cement grout shall consist of Portland cement conforming to ASTM C 150, Type I or II, bentonite, sand and water. Cement grout shall be proportioned not to exceed 6 gallons of water per cubic foot of cement, with a mixture of such consistency that it can be forced through grout pipes. Between 3 and 5 percent by weight of bentonite powder shall be added to reduce shrinkage.

#### 2.4 SAMPLE CONTAINERS.

Cutting samples shall be placed in clear plastic containers, or heavy-duty quart-sized freezer bags (minimum 7-inch by 8-inch by 2.7 mils) and plainly labeled with the well number and depth at which the sample was taken. Container shall be labeled in permanent indelible ink. Containers shall be furnished by the Contractor.

#### 3 EXECUTION

#### 3.1 WELL DRILLING.

3.1.1 Drilling and Casing. Drilling shall be accomplished by any method the Contractor chooses, except as hereinafter specified, but in such manner that the installation of the casing can be concurrent with the drilling operation if necessary to prevent caving. Explosives shall not be used during well construction without specific approval of the Contracting Officer for each shot proposed. The use of drilling equipment employing the introduction of bentonite or other clay based drilling mud into the boring is expressly prohibited. Biodegradable liquid foaming agents may be used if necessary. The Contractor shall so conduct his operations that the full specified depth of each well will be obtained with the bottom diameter of the hole of sufficient size for the installation of a nominal 8-inch telescoping well screen as described in Paragraph WELL SCREEN ASSEMBLY. The string of pipe used as casing in the well shall be continuous with tight joints from the bottom terminal to a height above the ground sufficient to assure adequate protection from surface contamination. In the final construction of the well if pipe sizes are reduced, an overlap of at least 8 feet shall be left and the bottom of the annular space between the casings shall be sealed with a watertight packer. The remainder of the annular space shall be pressure grouted with bentonite or neat cement. The Contractor shall use temporary casing with sufficient annular space to meet the requirements for formation sealing required in WAC 173-160.

- 3.1.2 Drilling Equipment. At each well site a plastic sheeting (10 mil) pad with berm shall be placed under the drill rig to prevent spilled or leaking fuel and lubricants from entering the soil cover. If compressed air is used for the work the compressed air shall be filtered, and the filter shall be changed according to the manufacturer's recommendation during operation with a record kept of this maintenance. A cyclone shall be used. The Contractor shall provide and a portable water level measuring device of sufficient length to measure the water level to 300-feet depth. The device shall be available on-site at all times and be accurate to the nearest 0.1 foot.
- 3.1.3 Blowout Tests. As drilling progresses, the Contractor shall make blowout tests whenever water-bearing stratum is penetrated in order to determine the quality and quantity of water available. Once water is encountered, the depth to the water level shall be measured and recorded at the beginning of each shift. Blowout tests shall be made whenever any change in the water level is observed or upon direction by the COR. A complete written record of these tests shall be kept for future reference. For a blowout test, Contractor shall have equipment capacity to airlift a minimum of 100 gallons per minute (g.p.m.) for 30 minutes.
- 3.1.4 Drill Cutting Samples. The Contractor shall save and deliver to the COR a sample of drill cuttings taken from each 5-foot depth interval and from every change in material encountered. Upon encountering an aquifer, the Contractor shall collect cutting samples at 2-foot intervals. Contractor shall supply plastic containers, or heavy-duty quart-sized freezer bags for the samples.
- 3.1.5 Drive Samples. Up to two mechanically driven split spoon or heavy walled solid tube soil samples may be required at depths determined by the Government Inspector. Prior to sampling, the well shall be cleaned of all cuttings and caving and cased to the bottom.
- 3.1.6 Drill Cuttings, Drill Water Return and Development Water. Drill cuttings shall be disposed of at or near the drill site in areas approved by the COR and in a manner not to damage adjacent work nor create a safety hazard. Drill water, return, and development water may be wasted on the ground surface at the site, in a manner which will dispose of the water without impeding traffic, constructing a hazard to persons or property, or inundating the site.
- 3.1.7 Alignment. Drilling shall be substantially vertical and casing shall be set approximately plumb. When completed, the well shall meet the specifications for alignment and plumbness as set forth in AWWA A100. Contractor shall test alignment and plumbness of the boring according to AWWA A100 when requested by the Contracting Officer's Authorized Representative. No separate payment will be made for surveys required under this paragraph. If alignment and plumbness are found to be unacceptable the well shall be redrilled or such other corrective measures taken as may be required to correct the alignment or plumbness. The surveys for boring acceptability as herein described shall be witnessed by the Government inspector.

# 3.2 INSTALLATION OF WELL SCREEN.

3.2.1 Screen Location. The Contractor shall have the responsibility of placing the well screen in the appropriate location in the wellbore so that the completed water well functions satisfactorily. The Contractor shall be responsible for gradation testing of the aquifer boring samples. The Contractor shall provide a sieve analysis of one or more representative sample(s) of aquifer

material in which the screen is to be placed which demonstrates that the screen is compatible with the aquifer material. The sieve analysis shall be conducted in accordance with ASTM C 117 and C 136 and results shall be submitted, together with the recommended well screen slot size, to the Contracting Officer for approval or modification prior to ordering the well screen from the screen manufacturer.

3.2.2 Screen Installation. After the well has been drilled to the specified depth, the boring shall be cleaned out and well screen assembly shall be installed within the limits of the aquifer at depths determined by the Government Inspector and approved by the COR. If telescoping screen is used, the screen assembly shall be carefully lowered into the cased borehole to the selected position and the casing shall be pulled back so that the bottom of the casing is at approximately the top of the screen. The Contractor shall provide a positive method so that the screen and riser pipe remain at the prescribed depth during and after pulling the casing. Upon completion, the top of the well casing shall be at least 6 inches above the ground surface.

#### 3.3 SANITARY SURFACE SEAL.

The well casing annulus shall be sealed below the ground surface in accordance with Washington State Standard WAC 173-160, except that from ground surface to 5 feet depth the sealing material shall be bentonite. This is to permit excavation for permanent construction at a later date.

#### 3.4 WELL DEVELOPMENT.

After the well screen has been installed, but no sooner than 48 hours after annulus grouting seal is completed the Contractor shall thoroughly develop the well by such approved methods as shall be necessary to give maximum yield of water per foot of drawdown and extract from the water bearing formation the maximum practical quantity of such sands as may, during the life of the well, be drawn through the screen or well casing perforations when the well is pumped under maximum conditions of drawdown. The Contractor shall furnish all necessary pumps, compressors, plungers, bailing, dispersing agents, or other needed equipment. More than one method may be required to thoroughly develop the well. The Contractor shall develop the well by such methods as approved until the sand content is less than 5 mg/L as retained (dry) on a no. 200 sieve and until 5 Nephelometric Turbidity Units (NTU) or less are reached, but in no case less than 8 hours. The nephelometric turbidity of the water taken from the well shall be determined in accordance with ASTM D 1889. The sand content shall be measured with an Imhoff cone. The well shall be thoroughly cleaned from top to bottom before beginning the well tests. The final development of the well shall be subject to the approval of the COR. Upon completion of developing operations, the Contractor shall remove all sediment remaining in the well and leave the well in condition for installation of a test pump.

#### 3.5 WELL PUMPING TESTS.

- 3.5.1 Purpose and Scope. A well test is required in a water supply well. The well test is intended to assure that a functioning well has been installed, identify sand production problems, determine aquifer properties, and secure water samples for analysis. The well shall recover from development procedures for a minimum of 8 hours prior to the well test. All test results (drawdowns and pumping rates, sand content) shall be submitted with the final drillers log.
- 3.5.2 Equipment. The Contractor shall furnish, install, and operate a pump capable of pumping at rates varying from 150 gallons to 500 gallons per minute. A satisfactory throttling device shall

be installed in the discharge line so that the discharge may be reduced to the minimum rate of 150 gpm. The pump column shall be equipped with a foot valve to prevent backflow into the well. The Contractor assumes all liability for damage to the pump from sand entering the well. The Contractor shall furnish a weir box, a calibrated orifice, flow meter, or other equal device for measuring water being pumped in gallons per minute for each pumping rate specified. To measure the water level in the well, an airline, complete with pressure gauge, compressed air tank, and check valve, or other water level measuring device approved by the Contracting Officer, shall be provided by the Contractor. The airline shall be fastened securely to the pump column at the maximum desired pumping level, but in no case shall be nearer than 2 feet from the intake. Before beginning the pumping test, the air line water level measurement should read within 1 to 2 feet of the water level as measured with an M-scope or mechanical water level measuring device.

- 3.5.3 Discharge Pipeline. The Contractor shall furnish all labor, materials, and equipment, and perform all work required to satisfactorily install, maintain, and operate all temporary drainage, piping, and other equipment needed to prevent the site of the work from being inundated as a result of pumping operations, and maintain a water-free construction site. The required temporary drainage facilities shall be provided by the Contractor and shall be installed in a manner that will dispose of the water without impeding traffic, constructing a hazard to persons or property, or damaging existing facilities. The proposed conduit and routing shall be approved by the COR prior to installation by the Contractor. Water shall be discharged a minimum of 300 feet from the well being tested.
- 3.5.4 Step-Drawdown Testing. Upon installation of the equipment, a step-drawdown test shall be conducted in the well. Pumping shall commence at a constant rate equal to 175 gpm and continued for 2 hours. Water levels shall be measured and recorded during the test every 30 seconds for the first 5 minutes, every minute for 5 to 15 minutes, every 5 minutes for 15 to 60 minutes, and every 15 minutes for 60 to 120 minutes. The pumping rate shall then be increased to 250 gpm and continued for another 2 hours. Measurements shall be taken according to the same schedule as previously described. Immediately following this step, two additional steps shall be conducted according to the same protocol at flow rates of 300 and 450 gpm (in that order). If the pump breaks suction at a pumping rate prior to the 2 hours, subsequent steps at higher rates need not be attempted; however, the flow rate shall be reduced until the water level while pumping stabilizes at least 2 feet above the pump intake and the test continued for the remainder of the 2 hours. The proposed pumping rates or times may be changed by the COR prior to or during the test.
- 3.5.5 Water Quality Sample Collection. A sampling tap with gate valve shall be provided on the underside of the discharge line near the wellhead to allow for water quality sampling. Sampling will be conducted by the Government near the completion of the pumping test. Coordination, assistance and cooperation with sampling personnel are requested.
- 3.5.5 Recovery Measurements. Recovery measurements shall be made in the same manner as the drawdown measurements. Immediately after the pump has been turned off, measurements shall be taken at the same frequency as prescribed for drawdown until the water in the well nears prepumping static levels. Upon completion of all pumping tests and recovery measurements, the test pump and associated equipment shall be removed from the well and remain the property of the Contractor.
- 3.5.6 Capping. At all times during the progress of the work, the Contractor shall protect the well in such a manner as to effectively prevent either tampering with the well or of the entrance of foreign matter into it, and

upon its completion, he shall provide and set a substantial cap with a 6-inch hasp. The Government shall furnish the lock.

3.5.7 Cleanup. After completion of all work all tools, appliances, surplus materials, temporary drainage, rubbish, and debris incidental to work shall be removed. All excavation and vehicular ruts shall be backfilled and dressed up to conform to the existing landscape. All work specified under this section shall be performed by the Contractor and shall be performed to the satisfaction of the Contracting Officer. Utilities, which must be repaired or replaced due to the Contractor's negligence, will be the responsibility of the Contractor and repair or replacement shall be at the Contractor's expense.

#### **END OF SECTION**

WAGE DETERMINATION NO: 94-2567 REV (27) AREA: WA,TACOMA					
HEALTH AND WELFARE LEVEL - INSURANCE ONLY **OTHER WELFARE LEVEL WD:94-2568					
***********************					
REGISTER OF WAGE DETERMINATIONS UNDER   U.S. DEPARTMENT OF LABOR THE SERVICE CONTRACT ACT   EMPLOYMENT STANDARDS ADMINISTRATION By direction of the Secretary of Labor   WAGE AND HOUR DIVISION   WASHINGTON D.C. 20210					
     Wage Determination No.: 1994-2567					
William W.Gross Division of   Revision No.: 27					
Director Wage Determinations Date Of Revision: 09/20/2004					
State: Washington					
Area: Washington Counties of Lewis, Pierce, Thurston					
**Fringe Benefits Required Follow the Occupational Listing**					
OCCUPATION CODE - TITLE MINIMUM WAGE RATE					
01000 - Administrative Support and Clerical Occupations					
01011 - Accounting Clerk I 11.92					
01012 - Accounting Clerk II 13.23					
01013 - Accounting Clerk III 15.44					

01014 4 2 2 01 1 77		17.00
01014 - Accounting Clerk IV	15.54	17.28
01030 - Court Reporter	15.54	17.77
01050 - Dispatcher, Motor Vehicle		17.77
01060 - Document Preparation Clerk		12.70
01070 - Messenger (Courier)		10.96
01090 - Duplicating Machine Operator	1001	12.70
01110 - Film/Tape Librarian	13.94	
01115 - General Clerk I	10.21	
01116 - General Clerk II	11.53	
01117 - General Clerk III	14.80	
01118 - General Clerk IV	16.24	
01120 - Housing Referral Assistant		17.89
01131 - Key Entry Operator I		12.57
01132 - Key Entry Operator II		14.56
01191 - Order Clerk I	12.86	
01192 - Order Clerk II	14.04	
01261 - Personnel Assistant (Employment) I	13.21	
01262 - Personnel Assistant (Employment) II	14.66	
01263 - Personnel Assistant (Employment) III	16.20	
01264 - Personnel Assistant (Employment) IV	18.61	
01270 - Production Control Clerk		18.66
01290 - Rental Clerk	12.63	
01300 - Scheduler, Maintenance		14.37
01311 - Secretary I		14.37
01312 - Secretary II		15.54
01313 - Secretary III	17.35	
01314 - Secretary IV	21.44	
01315 - Secretary V	24.91	
01320 - Service Order Dispatcher		16.27
01341 - Stenographer I	14.10	
01342 - Stenographer II	16.02	
01400 - Supply Technician		18.49
01420 - Survey Worker (Interviewer)		13.39
01460 - Switchboard Operator-Receptionist	12.38	
01510 - Test Examiner	15.54	
01520 - Test Proctor	15.54	
01531 - Travel Clerk I	11.23	
01532 - Travel Clerk II	12.22	
01533 - Travel Clerk III	13.16	
01611 - Word Processor I	13.46	
01612 - Word Processor II	15.07	
01613 - Word Processor III	16.24	
03000 - Automatic Data Processing Occupations	10.2	
03010 - Computer Data Librarian		15.08
03041 - Computer Operator I		15.08
03042 - Computer Operator II		16.73
03043 - Computer Operator III		18.66
03044 - Computer Operator IV		21.87
03045 - Computer Operator V		24.27
03071 - Computer Programmer I (1)		16.36
03072 - Computer Programmer II (1)		20.71
03073 - Computer Programmer III (1)		27.62
03074 - Computer Programmer IV (1)	27.62	21.02
oco, i Computer i rogitalimiter i v (1)	21.02	

03101 - Computer Systems Analyst I (1)	27.62	
03102 - Computer Systems Analyst II (1)	27.62	
03103 - Computer Systems Analyst III (1)	27.62	
03160 - Peripheral Equipment Operator		15.08
05000 - Automotive Service Occupations		
05005 - Automotive Body Repairer, Fiberglass	19.80	
05010 - Automotive Glass Installer		20.46
05040 - Automotive Worker		20.46
05070 - Electrician, Automotive		21.78
05100 - Mobile Equipment Servicer		18.55
05130 - Motor Equipment Metal Mechanic	21.78	
05160 - Motor Equipment Metal Worker	20.46	
05190 - Motor Vehicle Mechanic		21.69
05220 - Motor Vehicle Mechanic Helper	18.55	
05250 - Motor Vehicle Upholstery Worker	20.46	
05280 - Motor Vehicle Wrecker		20.46
05310 - Painter, Automotive		21.12
05340 - Radiator Repair Specialist		20.46
05370 - Tire Repairer	14.81	
05400 - Transmission Repair Specialist		21.78
07000 - Food Preparation and Service Occupations		
(not set) - Food Service Worker		9.24
07010 - Baker		12.63
07041 - Cook I		11.04
07042 - Cook II		12.14
07070 - Dishwasher	9.55	
07130 - Meat Cutter	18.28	
07250 - Waiter/Waitress	9.27	
09000 - Furniture Maintenance and Repair Occupations	7.21	
09010 - Electrostatic Spray Painter		17.45
09040 - Furniture Handler	15.33	17.43
09070 - Furniture Refinisher	17.45	
09100 - Furniture Refinisher Helper	17.73	15.33
09110 - Furniture Repairer, Minor		16.37
09130 - Upholsterer	17.92	10.57
11030 - General Services and Support Occupations	17.92	
11030 - Cleaner, Vehicles	11 21	
11060 - Cleaner, Venicles 11060 - Elevator Operator	11.31 10.66	
11090 - Gardener	10.00	13.31
11121 - House Keeping Aid I		9.34
11122 - House Keeping Aid II		10.66
11150 - Janitor	12.16	11.19
11210 - Laborer, Grounds Maintenance	13.16	0.24
11240 - Maid or Houseman	1654	9.34
11270 - Pest Controller	16.54	
11300 - Refuse Collector	13.61	
11330 - Tractor Operator	14.41	
11360 - Window Cleaner	11.78	
12000 - Health Occupations	14.00	
12020 - Dental Assistant	14.32	
12040 - Emergency Medical Technician (EMT)/Paramedic		15.55
/Ambulance Driver		17.57
12071 - Licensed Practical Nurse I		14.97

12072 - Licensed Practical Nurse II		16.78
12073 - Licensed Practical Nurse III		18.77
12100 - Medical Assistant	13.46	
12130 - Medical Laboratory Technician	15.77	
12160 - Medical Record Clerk		15.77
12190 - Medical Record Technician		16.03
12221 - Nursing Assistant I		9.66
12222 - Nursing Assistant II		10.72
12223 - Nursing Assistant III		11.85
12224 - Nursing Assistant IV		14.10
12250 - Pharmacy Technician		14.43
12280 - Phlebotomist	14.53	
12311 - Registered Nurse I	20.46	
12312 - Registered Nurse II	25.01	
12313 - Registered Nurse II, Specialist		25.01
12314 - Registered Nurse III	30.21	
12315 - Registered Nurse III, Anesthetist		30.21
12316 - Registered Nurse IV		36.29
13000 - Information and Arts Occupations		30.27
13002 - Audiovisual Librarian		19.80
13011 - Exhibits Specialist I	16.95	17.00
13012 - Exhibits Specialist II	20.94	
13013 - Exhibits Specialist III	25.64	
13041 - Illustrator I	23.04	16.05
13042 - Illustrator II		16.95
		20.94
13043 - Illustrator III		25.64
13047 - Librarian	10.70	22.93
13050 - Library Technician	13.73	
13071 - Photographer I	17.23	
13072 - Photographer II	19.32	
13073 - Photographer III	23.83	
13074 - Photographer IV	29.15	
13075 - Photographer V	35.39	
15000 - Laundry, Dry Cleaning, Pressing and Related Occupa		
15010 - Assembler	8.38	
15030 - Counter Attendant		8.38
15040 - Dry Cleaner	10.54	
15070 - Finisher, Flatwork, Machine		8.38
15090 - Presser, Hand	8.38	
15100 - Presser, Machine, Drycleaning		8.38
15130 - Presser, Machine, Shirts		8.38
15160 - Presser, Machine, Wearing Apparel, Laundry		8.38
15190 - Sewing Machine Operator		11.23
15220 - Tailor		11.91
15250 - Washer, Machine		9.10
19000 - Machine Tool Operation and Repair Occupations		
19010 - Machine-Tool Operator (Toolroom)	21.05	
19040 - Tool and Die Maker		24.23
21000 - Material Handling and Packing Occupations		
21010 - Fuel Distribution System Operator	22.09	
21020 - Material Coordinator		15.99
21030 - Material Expediter	15.99	-0.77
21040 - Material Handling Laborer	20.77	14.40
210.00 Minorial Handling Educator		11.10

21050 - Order Filler		12.87
21071 - Forklift Operator	18.06	
21080 - Production Line Worker (Food Processing)		16.32
21100 - Shipping/Receiving Clerk		15.17
21130 - Shipping Packer	15.17	
21140 - Store Worker I	12.99	
21150 - Stock Clerk (Shelf Stocker; Store Worker II)		16.39
21210 - Tools and Parts Attendant		18.06
21400 - Warehouse Specialist		16.32
23000 - Mechanics and Maintenance and Repair Occupation	S	
23010 - Aircraft Mechanic	22.24	
23040 - Aircraft Mechanic Helper		17.67
23050 - Aircraft Quality Control Inspector		22.94
23060 - Aircraft Servicer	19.96	
23070 - Aircraft Worker	20.89	
23100 - Appliance Mechanic		19.42
23120 - Bicycle Repairer	14.81	
23125 - Cable Splicer	25.05	
23130 - Carpenter, Maintenance		21.23
23140 - Carpet Layer	20.46	
23160 - Electrician, Maintenance		25.67
23181 - Electronics Technician, Maintenance I	20.74	20.07
23182 - Electronics Technician, Maintenance II	23.58	
23183 - Electronics Technician, Maintenance III	25.30	
23260 - Fabric Worker	18.55	
23290 - Fire Alarm System Mechanic	10.55	19.80
		18/13
23310 - Fire Extinguisher Repairer	21.78	18.43
23340 - Fuel Distribution System Mechanic	21.78	18.43
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker	16.91	
<ul><li>23340 - Fuel Distribution System Mechanic</li><li>23370 - General Maintenance Worker</li><li>23400 - Heating, Refrigeration and Air Conditioning Mechan</li></ul>	16.91 nic 1	8.98
<ul> <li>23340 - Fuel Distribution System Mechanic</li> <li>23370 - General Maintenance Worker</li> <li>23400 - Heating, Refrigeration and Air Conditioning Mechanic</li> <li>23430 - Heavy Equipment Mechanic</li> </ul>	16.91	8.98
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechan 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator	16.91 nic 1	8.98 24.07
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic	16.91 nic 1	8.98 24.07 22.62
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer	16.91 nic 1 22.62	8.98 24.07
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechan 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith	16.91 nic 1	8.98 24.07 22.62 11.17
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechan 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic	16.91 nic 1 22.62	8.98 24.07 22.62 11.17 21.61
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance	16.91 nic 1 22.62	8.98 24.07 22.62 11.17 21.61 19.43
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechan 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper	16.91 iic 1 22.62	8.98 24.07 22.62 11.17 21.61
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright	16.91 nic 1 22.62	8.98 24.07 22.62 11.17 21.61 19.43 12.47
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechan 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer	16.91 iic 1 22.62 19.24	8.98 24.07 22.62 11.17 21.61 19.43
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft	16.91 iic 1 22.62	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance	16.91 iic 1 22.62 19.24	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance	16.91 iic 1 22.62 19.24	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45 24.16
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance	16.91 sic 1 22.62 19.24 21.74 18.88	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23800 - Pneudraulic Systems Mechanic	16.91 iic 1 22.62 19.24	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45 24.16 21.88
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger	16.91 iic 1 22.62 19.24 21.74 18.88 21.90	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45 24.16
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic	16.91 dic 1 22.62 19.24 21.74 18.88 21.90 20.30	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45 24.16 21.88
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic 23890 - Sheet-Metal Worker, Maintenance	16.91 iic 1 22.62 19.24 21.74 18.88 21.90	8.98  24.07 22.62 11.17  21.61 19.43 12.47  21.16 17.45 24.16 21.88  20.32
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23890 - Pipefitter, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic 23890 - Sheet-Metal Worker, Maintenance 23910 - Small Engine Mechanic	16.91 sic 1 22.62 19.24 21.74 18.88 21.90 20.30 21.53	8.98 24.07 22.62 11.17 21.61 19.43 12.47 21.16 17.45 24.16 21.88
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23800 - Plumber, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic 23890 - Sheet-Metal Worker, Maintenance 23910 - Small Engine Mechanic 23930 - Telecommunication Mechanic I	16.91 22.62  19.24  21.74  18.88  21.90  20.30  21.53  19.80	8.98  24.07 22.62 11.17  21.61 19.43 12.47  21.16 17.45 24.16 21.88  20.32
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23800 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic 23890 - Sheet-Metal Worker, Maintenance 23910 - Small Engine Mechanic 23930 - Telecommunication Mechanic I	16.91 sic 1 22.62 19.24 21.74 18.88 21.90 20.30 21.53	8.98  24.07 22.62 11.17  21.61 19.43 12.47  21.16  17.45 24.16 21.88  20.32
23340 - Fuel Distribution System Mechanic 23370 - General Maintenance Worker 23400 - Heating, Refrigeration and Air Conditioning Mechanic 23430 - Heavy Equipment Mechanic 23440 - Heavy Equipment Operator 23460 - Instrument Mechanic 23470 - Laborer 23500 - Locksmith 23530 - Machinery Maintenance Mechanic 23550 - Machinist, Maintenance 23580 - Maintenance Trades Helper 23640 - Millwright 23700 - Office Appliance Repairer 23740 - Painter, Aircraft 23760 - Painter, Maintenance 23790 - Pipefitter, Maintenance 23800 - Plumber, Maintenance 23800 - Plumber, Maintenance 23820 - Pneudraulic Systems Mechanic 23850 - Rigger 23870 - Scale Mechanic 23890 - Sheet-Metal Worker, Maintenance 23910 - Small Engine Mechanic 23930 - Telecommunication Mechanic I	16.91 22.62  19.24  21.74  18.88  21.90  20.30  21.53  19.80	8.98  24.07 22.62 11.17  21.61 19.43 12.47  21.16 17.45 24.16 21.88  20.32

23965 - Well Driller	21.78	
23970 - Woodcraft Worker		21.90
23980 - Woodworker	16.91	
24000 - Personal Needs Occupations		
24570 - Child Care Attendant		10.33
24580 - Child Care Center Clerk		13.41
24600 - Chore Aid	10.08	
24630 - Homemaker	14.91	
25000 - Plant and System Operation Occupations		
25010 - Boiler Tender	20.49	
25040 - Sewage Plant Operator		23.68
25070 - Stationary Engineer	20.49	
25190 - Ventilation Equipment Tender		15.89
25210 - Water Treatment Plant Operator	23.68	
27000 - Protective Service Occupations		
(not set) - Police Officer	24.27	
27004 - Alarm Monitor	17.34	
27006 - Corrections Officer	20.71	
27010 - Court Security Officer		23.51
27040 - Detention Officer	23.51	
27070 - Firefighter		25.24
27101 - Guard I		9.35
27102 - Guard II		13.68
28000 - Stevedoring/Longshoremen Occupations		
28010 - Blocker and Bracer	20.66	
28020 - Hatch Tender	20.66	
28030 - Line Handler	20.66	
28040 - Stevedore I	20.19	
28050 - Stevedore II		21.57
29000 - Technical Occupations		21.07
21150 - Graphic Artist	21.29	
29010 - Air Traffic Control Specialist, Center (2)	31.66	
29011 - Air Traffic Control Specialist, Station (2)	21.83	
29012 - Air Traffic Control Specialist, Terminal (2)	24.05	
29023 - Archeological Technician I	2 1.05	18.88
29024 - Archeological Technician II		21.10
29025 - Archeological Technician III		26.14
29030 - Cartographic Technician		24.74
29035 - Computer Based Training (CBT) Specialist/ Instructor	27	.62
29040 - Civil Engineering Technician	2,	23.08
29061 - Drafter I		15.03
29062 - Drafter II		16.87
29063 - Drafter III		19.04
29064 - Drafter IV		23.59
29081 - Engineering Technician I		15.93
29082 - Engineering Technician II		17.87
29083 - Engineering Technician III		20.17
29084 - Engineering Technician IV		24.99
29085 - Engineering Technician V		30.56
29086 - Engineering Technician VI		36.96
29090 - Environmental Technician		20.86
29100 - Flight Simulator/Instructor (Pilot)		30.58
29160 - Instructor		26.63

29210 - Laboratory Technician		18.55
29240 - Mathematical Technician		21.90
29361 - Paralegal/Legal Assistant I		18.10
29362 - Paralegal/Legal Assistant II		20.39
29363 - Paralegal/Legal Assistant III		22.62
29364 - Paralegal/Legal Assistant IV		24.43
29390 - Photooptics Technician		21.52
29480 - Technical Writer	23.90	
29491 - Unexploded Ordnance (UXO) Technician I		20.12
29492 - Unexploded Ordnance (UXO) Technician II		24.35
29493 - Unexploded Ordnance (UXO) Technician III		29.18
29494 - Unexploded (UXO) Safety Escort	20.12	
29495 - Unexploded (UXO) Sweep Personnel		20.12
29620 - Weather Observer, Senior (3)		20.86
29621 - Weather Observer, Combined Upper Air and		
Surface Programs (3)		17.84
29622 - Weather Observer, Upper Air (3)	17.84	
31000 - Transportation/ Mobile Equipment Operation Occupat	ions	
31030 - Bus Driver	16.85	
31260 - Parking and Lot Attendant		8.95
31290 - Shuttle Bus Driver	13.28	
31300 - Taxi Driver	10.57	
31361 - Truckdriver, Light Truck		13.28
31362 - Truckdriver, Medium Truck		17.80
31363 - Truckdriver, Heavy Truck		18.69
31364 - Truckdriver, Tractor-Trailer		18.69
99000 - Miscellaneous Occupations		
99020 - Animal Caretaker	11.73	
99030 - Cashier		10.13
99041 - Carnival Equipment Operator		11.56
99042 - Carnival Equipment Repairer		11.98
99043 - Carnival Worker	8.83	
99050 - Desk Clerk	10.80	
99095 - Embalmer	22.36	
99300 - Lifeguard		10.57
99310 - Mortician		22.36
99350 - Park Attendant (Aide)		13.28
99400 - Photofinishing Worker (Photo Lab Tech., Darkroom T	ech)	11.06
99500 - Recreation Specialist	14.11	
99510 - Recycling Worker	16.94	
99610 - Sales Clerk	12.84	
99620 - School Crossing Guard (Crosswalk Attendant)		15.02
99630 - Sport Official	10.57	
99658 - Survey Party Chief (Chief of Party)	27.75	
99659 - Surveying Technician (Instr. Person/Surveyor Asst./I	nstr.)	22.18
99660 - Surveying Aide	16.19	
99690 - Swimming Pool Operator		12.62
99720 - Vending Machine Attendant		13.20
99730 - Vending Machine Repairer		16.85
99740 - Vending Machine Repairer Helper	14.41	

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#### ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$2.59 an hour or \$103.60 a week or \$448.93 a month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

- 1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)
- 2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.
- 3) WEATHER OBSERVERS NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This

includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by

laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

#### \*\* NOTES APPLYING TO THIS WAGE DETERMINATION \*\*

Under the policy and guidance contained in All Agency Memorandum No. 159, the Wage and Hour Division does not recognize, for section 4(c) purposes, prospective wage rates and fringe benefit provisions that are effective only upon such contingencies as "approval of Wage and Hour, issuance of a wage determination, incorporation of the wage determination in the contract, adjusting the contract price, etc." (The relevant CBA section) in the collective bargaining agreement between (the parties) contains contingency language that Wage and Hour does not recognize as reflecting "arm's length negotiation" under section 4(c) of the Act and 29 C.F.R. 5.11(a) of the regulations. This wage determination therefore reflects the actual CBA wage rates and fringe benefits paid under the predecessor contract.

# Source of Occupational Title and Descriptions:

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997, unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202-783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

#### Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be

retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.